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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CHEUNG, MARY DA ZHI WANG

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,083

Applicant(s)

FISH ET AL.

Examiner

Mary Cheung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

1. This action is in response to the application filed on January 16, 2002. Claims 1-47 are pending.

Drawings

2. The drawings are objected to because the item 104 within the item 200 in Fig. 1 should be label "204" instead of "104" according the specification (i.e. paragraphs 25, 27, 31, 34, 36-38). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 29 is objected to because of the following informalities: in line 3 of claim 29, the number "106" should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 15-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "said system service" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 25-27 recites the limitation "said access control server" in line 1 of each claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "said service operator" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 16-42 are rejected for incorporating the errors of their respective base claims by dependency.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 6-23, 28-33 and 36-47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claims 6-23, 28-33 and 36-47 only recite an abstract idea. The recited steps of the purchaser receiving services from retailer or the service provider does not apply, involve, use, or advance the technological arts since all of the recited steps **can be performed in the mind of the user or by use of a pencil and paper**. These steps only constitute an idea of how to provide services to customer over another.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention providing services to customer (i.e., useful, concrete and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 6-23, 28-33 and 36-47 are deemed to be directed to non-statutory subject matter. The applicant is advised **to implement computer technology into the**

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independent claims in order to overcome the rejection, such as “electronically activating said security device...”.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 43-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Solomon, U. S. Patent Application Publication 2003/0070174 A1.

As to claims 43-47, Solomon teaches a method of doing business comprising: obtaining data from a purchaser of set-top terminal or system service (paragraphs 57-60); providing said data to a merchant of said set-top terminal or service provider of said system service, said purchaser receiving a benefit in returning for providing said data (paragraphs 57-66).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 1-6 and 12-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solomon, U. S. Patent Application Publication 2003/0070174 A1 in view of O'Neil et al., U. S. Patent 5,887,253.

As to claim 1, Solomon an apparatus for activating a security module in a set-top terminal purchased from a retailer, the apparatus comprising (paragraphs 52, 95 and Fig. 4):

- a) A set-top terminal provided to a customer (paragraph 52 and Figs. 1-2);
- b) A security device retrieved and provided to said customer, and said security device being activated when obtaining a credit information from said customer, performs a credit check on said customer, and establishes an account with a system operator, and retrieves an activation key (paragraphs 58-59, 108-110, 116).

Solomon does not specifically teach the security device is retrieved by said retailer and said security device is activated by said retailer such as obtains credit information from said customer, and performs a credit check on said customer, and establishes an account with a system operator, and retrieves an activation key.

However, O'Neil teaches well known procedure that a security device is retrieved and activated by a retailer (column 1 lines 20-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the security device in Solomon's teaching to be retrieved and activated by the retailer so that the purchase from the retailer is ready to use.

As to claim 2, Solomon teaches said security device includes a serial number that is registered with said system operator (paragraphs 57-58).

As to claims 3-4, Solomon teaches said security device contains an activation key and the security device will not provide services to the customer without the activation key (Fig. 4). Solomon modified by O'Neil does not specifically teach said security device contains a physical layer key, and said physical layer cannot be read if said security device is disassembled. It would have been obvious to one of ordinary skill in the art to allow the activation key in Solomon's teaching to be a physical layer key, and said physical layer cannot be read if said security device is disassembled for better protecting the security device from unauthorized usages.

As to claim 5, Solomon teaches said security device contains said activation key (Fig. 4).

As to claim 12, Solomon teaches said activation key permits reception of premium services from said system operator (paragraph 117 and Fig. 4).

As to claims 13-14, Solomon modified by O'Neil teaches retailer enters said activation key into said security device (O'Neil: column 1 lines 20-31).

As to claim 17, Solomon does not specifically teach the security module and the set-top terminal each have separate and unique serial number. However, O'Neil teaches a cellular telephone comprising a security module, and the cellular telephone and the security module each have a separate and unique identification number (abstract; *specifically, "the security module" corresponds to the SIM in O'Neil's teaching*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the security module and the set-top terminal each have separate and unique identification number for better identifying each component in the set-top terminal.

As to claims 24-27, Solomon does not specifically teach an access control administrator commands a secure server to prompt said secure key database to retrieve said activation key, said access control administrator being one of an access control affiliated with said system operator, an independent service provider, and a control administrator affiliated with a manufacturer of said set-top terminal. However, this matter is taught by O'Neil as a customer activation center provides information to activate cellular phone through the retailer or the purchaser (column 1 lines 20-31 and column 2 lines 45-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow to Solomon's teaching to include the feature of an access control administrator commands a secure server to prompt said secure key database to retrieve said activation key, said access control administrator being one of an access control affiliated with said system operator, an independent service provider, and a control administrator affiliated with a manufacturer of said set-top terminal for better control usages of the set-top terminal.

As to claim 28, Solomon teaches said account is established upon a determination that said purchaser meets criteria established by said system operator (paragraphs 56-60).

As to claim 29, Solomon modified by O'Neil teaches said service operator prompts an access control affiliated with said system operator to register the serial number of said set-top terminal and the serial number of said security module (Solomon: paragraph 45; O'Neil: abstract; and see claim 7 above).

As to claim 30, Solomon teaches billing the set-top terminal (paragraph 67).

As to claims 31-33, Solomon modified by O'Neil teaches the retailer can authorize the security module as discussed above. Solomon modified by O'Neil does not specifically teach the system operator notifies an access control administrator that said retailer can authorize said security module. It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the system operator in the teaching of Solomon modified by O'Neil to include the feature of notifying an access control administrator that said retailer can authorize said security module for better co-operating the authorization process.

As to claims 34-35, Solomon teaches the retailer comprising a commercial retailer outlet and virtual store (paragraphs 52, 56).

As to claims 36-39, Solomon teaches a purchaser of said set-top terminal and said security module using card to pay for services and goods (paragraph 59). Solomon does not specifically teach a purchaser of said set-top terminal and said security module receives card, and said card is a promotional aid to stimulate sales. It would have been obvious to one of ordinary skill in the art to allow the purchaser to receives cards for a promotional aid for better marketing the goods and services.

As to claims 40-42, Solomon modified by O'Neil teaches teaching a purchaser provides a subscription service agreement and consumer credit data (Solomon: paragraph 59; O'Neil: column 1 lines 20-40 and column 13 lines 18-25).

Claims 6, 15-16 and 18-23 are parallel with the limitations in claims 1 and 3; thus they are rejected for the same reason.

12. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solomon, U. S. Patent Application Publication 2003/0070174 A1 in view of O'Neil et al.,

U. S. Patent 5,887,253 in further view of Lu, U. S. Patent Application Publication 2002/0157115 A1.

As to claim 7, Solomon modified by O'Neil teaches a security device as discussed above. Solomon modified by O'Neil does not specifically teach said security device is a removable module that is inserted into said set-top terminal to permit reception of the services from said system operator. However, Lu teaches a removable module can be inserted into a set-top box for permitting reception of services from system operator (abstract and paragraph 27 and Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the security device in the teaching of Solomon modified by O'Neil to be a removable module that can be inserted into the set-top box for permitting reception of services from system operator as taught by Lu for controlling user conditional access with greater flexibilities.

As to claim 8, Solomon teaches said security device includes a serial number that is registered with said system operator (paragraphs 57-58).

As to claim 9, Solomon modified by O'Neil teaches said security device is retained by said retailer prior to said step of activating (O'Neil: column 1 lines 20-31).

As to claims 10-11, Solomon teaches said security device contains an activation key and the security device will not provide services to the customer without the activation key (Fig. 4). O'Neil teaches said security device contains pre-registered key when provided to the retailer (column 2 lines 45-64). Solomon modified by O'Neil does not specifically teach said security device contains a pre-registered physical layer key when provided to said retailer, and said physical layer key cannot be read if said security device is disassembled. It would have been obvious to one of ordinary skill in

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the art to allow the activation key in the teaching of Solomon modified by O'Neil to be a physical layer key, and said physical layer cannot be read if said security device is disassembled for better protecting the security device from unauthorized usages.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Metz et al. (U. S. Patent 5,666,293) discloses downloading operating system software through a broadcast channel.

Wistendahl et al. (U. S. Patent 6,496,981) discloses converting media content for interactive TV use.

Ondeck (US 2002/0046083 A1) discloses after-sales customization specified by retailer acts as incentive.

Grauch et al. (WO 98/3114) discloses tracking network use.

Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Cheung whose telephone number is (571)-272-6705. The examiner can normally be reached on Monday – Thursday from 10:00 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (571) 272-6712.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax phone number for the organization where this application or proceedings is assigned are as follows:

(571) 273-8300 (Official Communications; including After Final
Communications labeled "BOX AF")

(571) 273-6705 (Draft Communications)

Mary Cheung
Primary Examiner
Art Unit 3621
September 30, 2005


MARY D. CHEUNG
PRIMARY EXAMINER